

AVRUKH, Abram Yakovlevich; LOSHAK, B.O., red.; LARIONOV, G.Ye.,
tekh. red. ...

[Problems in the production costs of electric and thermal
energy] Problemy sebestoimosti elektricheskoi i teplovoi
energii. Moskva, Gosenergoizdat, 1963. 303 p.
(MIRA 16:8)

(Electric power production--Costs)
(Electric utilities--Rates)

AVRUKH, A.Ya., kand.ekonomicheskikh nauk

New norms on the amortization of the basic assets of
power engineering enterprises. Elek. sta. 34 no.3:33-39
Mr '63. (MIRA 16:3)

(Electric power plants)
(Depreciation)

KOSTENKO, M.P.; MELENT'YEV, L.A.; KAMENSKIY, M.D.; ZALESSKIY, A.M.; BRIL',
R.Ya.; GORSHKOV, A.B.; SAVASHINSKAYA, V.I.; DOVGAL', S.A.; KOVALEV,
N.N.; BOLOTOV, V.V.; USOV, S.V.; GERASIMOV, V.N.; SIVAKOV, Ye.R.;
AVRUKH, A.Ya.; STARIKOV, V.G.; MIKHALEVICH, A.I.

I.V. Gofman; obituary. Elek. sta. 34 no.6:95 Je '63. (MIRA 16:9)
(Gofman, Igor' Valentinevich, 1903-1963)

AVRUKH, L. G.

PA 1/50T32

USSR/Engineering - Welding, Autogenous Sep 49
Flux

"Experience of Automatic Welding Under Flux in
Chemical Machine Building," L. G. Avrukh, Engr,
1½ pp

"Avtogen Delo" No 9

During 1948 - 1949 factory manual welding was
replaced by automatic welding for following
parts: refrigerator compressor frames, vacuum
filter bottoms, tanks, ammonia condensers,
vacuum driers, etc. Lists results obtained with
various flux mixtures. Mentions types of ma-
chines used. Includes two tables.

1/50T32

AVRUKH, M.

Passenger motorship made of plastics. Rech. transp. 22 no.11;
30-31 N '63. (MIRA 16:12)

1. Glavnyy konstruktor Tsentral'nogo tekhniko-konstruktorskogo byuro
Ministerstva rechnogo flota.

AVRUKH, M., inzhener.

Diesel-powered freighter for transporting consumers' goods. Mor.1 tech.
flot 14 no.3:18-22 M, '54. (MLBA 7:5)

(Ships--Cargo)

AVRUKH, Meyer Girsheviub; GOLOVANOY, N.V., redaktor; VOLCHOK, K.M.,
tekhnicheskii redaktor.

[Low-tonnage cargo motorships] Malotonnashnye gruzovye teplo-
khody. Leningrad, Izd-vo "Rechnoi transport", Leningradskoe
otd-nie, 1956. 77 p. (MIRA 9:6)
(Motorships)

AVRUKH, M.O.

Plastics used in shipbuilding for inland water transportation.
Rech. transp. 17 no. 7:24-28 J1 '58. (MIRA 11:8)

1. Glavnyy konstruktor Tsentral'nogo tekhniko-konstruktorskogo
byuro Ministerstva rechnogo flota.
(Shipbuilding)
(Plastics)

AVRUKH, M.G., inzh.

Ships made of plastic. Sudostroenie 25 no.1:37-42 Ja '59.
(Ships) (Plastics) (MIRA 12:3)

PHASE I BOOK EXPLOITATION

SOV/4945

Avrukh, Meyer Girshevich

Proyektirovaniye sudov iz plastmassy (Designing Ships of Plastic Materials)
Leningrad, Sudpromgiz, 1960. 339 p. 4,800 copies printed.

Scientific Eds.: P. Z. Li and A. A. Mndoyan; Ed.: A. I. Kuskova; Tech.
Ed.: N. V. Erastova.

PURPOSE: This book is intended for workers of design and construction organizations and for the operational and engineering personnel of the shipbuilding industry. It may also be used by students at shipbuilding institutes and tekhnikums.

COVERAGE: The author discusses the design, construction and engineering problems peculiar to the building of plastic ships. For purposes of comparison he also describes certain aspects of the design and construction of steel and light-alloy ships and analyzes the respective weights and operational characteristics of ships made of these materials and of plastics. Various types of small-tonnage craft for inland waterways are considered; their hulls, power plants, cargo-handling

Card 1/7

KATK , Pavel Pavlovich; KOSTROV, Aleksey Ivanovich; FAYNBERG,
Vim Davidovich [deceased]; AIRUKH, M.G., inzh.
retsenzent; IVCHIKIN, V.F., inzh., retsenzent; GIMNOV,
V.I., nauchn. red.; SHAKHNOVA, V.M., red.

[Motorboats and launches made of plastics] Shliupki i ka-
tera iz plastmass. Leningrad, Izd-vo "Sudostroenie,"
1964. 263 p. (MIRA 17:6)

AVRUKH, M.G., inah.

Principal trends in the development of the construction of rivercraft
from plastics. Sudostroenie 30 no.8:12-18 Ag '64. (MIRA 18:7)

ACC NR: AR6032262 (✓) SOURCE CODE: UR/0398/66/000/006/V011/V011

AUTHOR: Avrukh, M. G.

TITLE: Plastic heat-insulating cover for holds of petroleum tankers

SOURCE: Ref. zh. Vodnyy transport, Abs. 6V63

REF SOURCE: Proizv. -tekhn. sb. Tekhn. upr. M-va reehn. flota RSFSR, no. 5(49), 1965, 18-24

TOPIC TAGS: heat insulation, petroleum product, petroleum industry equipment, petroleum fuel, petroleum transportation

ABSTRACT: The Ministry of the RSFSR River Fleet and other organizations are engaged in the development of plastic insulation covers for the holds of petroleum tankers. These covers reduce evaporation losses and losses occurring during transport of heated viscous fuel oil and anticorrosion agents. A project design of a tanker with freight-carrying capacity of 150 tons, equipped with heat insulation covers for hauling all types of petroleum products, has been made. Its heat-insulating layer consists of epoxy tar, foam plastic blocks, and fiberglass. The tanker in project is being compared with a tanker with removable cisterns and similar

Card 1/2

UDC: 621.315.616

ACC NR: AR6032262

dimensions. As a whole the tanker equipped with a heat-insulation device is 12 tons lighter, its haulage cost is 12% lower, and its labor productivity is 7% higher. Scale models of the heat insulation covers were made and tested for effectiveness, strength, and resistance to various petroleum products and cleaning products. They were satisfactory up to a temperature of 100C, and resisted light and dark petroleum products at temperatures ranging from 0 to 95C. The use of heat-insulating covers on petroleum tankers makes it possible to forego heating, double hulls, and bottoms, to reduce evaporation losses, and to mechanize the cleaning of the holds. Orig. art. has: 2 figures and 1 table. Abstracter: Ye. Chestnov. [Translation of abstract]

SUB CODE: 05, 11, 13/ SUBM DATE: none/

kh

Card 2/2

AVRUS - M.L.

А. Ф. Козлов

Сектор электротехники и электромеханики

Н. Н. Гринин,
А. С. Давыдов,
М. А. Ефремов

Научно-исследовательский институт электротехники и электромеханики

М. В. Лом,
М. Г. Марков,
Г. Н. Павлов

Институт электротехники и электромеханики Академии наук СССР

М. В. Лом

Научно-исследовательский институт электротехники и электромеханики

12 июня
(с 10 до 18 часов)

М. В. Лом,
М. Г. Марков

Протокол заседания секции электротехники и электромеханики

01

М. А. Козлов,
А. В. Козлов

Автоматический центр электротехники и электромеханики

М. А. Козлов

Всесоюзный научно-исследовательский институт электротехники и электромеханики АН СССР

Г. Н. Павлов

О электротехнике и электромеханике АН СССР

12 июня
(с 10 до 22 часов)

М. В. Лом

Подготовка информации для электротехники и электромеханики

М. В. Лом

Научно-исследовательский институт электротехники и электромеханики Академии наук СССР

Г. Н. Павлов

Секция электротехники и электромеханики Академии наук СССР

report submitted for the Confidential Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications to A. G. Popov (VVSU), Moscow,
8-12 June, 1959

AVRUKH, M.L.; MAGIDSON, L.M.; DMITRIYEV, V.G.

Principles of designing a small contactless automatic telephone
exchange using magnetic elements. Probl.pered.inform. no.9:150-159
'61. (MIRA 14:7)

(Telephones, Automatic)

AVRUKH, M.L., red.; VASIL'YEV, A.M., red.; SAYENKO, G.I., red.;
SINDILEVICH, L.M., red.

[Reading machines; papers presented at the conference on the processing of information, machine translation, and automatic reading]
Chitaiushchie ustroistva; sbornik dokladov na Konferentsii po obrabotke informatsii, mashinnomu perevodu i avtomaticheskomu chteniiu teksta. Moskva, 1962. 186 p. (MIRA 15:6)

1. Akademiya nauk SSSR. Institut nauchnoy informatsii.
(Reading machines)

AVRUKH, V.S., inzh.; MITROFANOV, N.N.

Use of aluminum bus conductors in short networks of ore smelting
furnaces. Prom. energ. 20 no.1:25-33 Ja '65.

(MIRA 1814)

MIRENBURG, L.A., inzh.; AVEUKH, V.Yu., inzh.

Converting turbogenerators to higher hydrogen pressure.
Energetika 8 no.3:30-34 Mr '60. (MIRA 13:6)
(Turbogenerators—Cooling)

AVRUKH, V.Yu., inzh.

Some reasons for increased vibration in synchronous multi-polar machines. Elek.sta. 31 no.1:38-41 Ja '60.

(MIRA 13:5)

(Electric motors, Synchronous--Vibration)

AVRUKH, V.Yu., inzh.; SAFEL'NIKOV, K.N., inzh.

Experience in redesigning the hydrogen cooling system of TV-
50-2 and TV2-100-2 generators. Energetik 9 no.1:4-7 Ja '61.
(MIRA 16:7)
(Electric generators)

DEGIL', G.S., inzh.; PANCHENKO, A.U., inzh.; TUROS, A.E., inzh.;
SAPEL'NIKOV, K.N., inzh.; AVRUKH, V.Yu., inzh.; VOINOV, A.G., inzh.

Seals of water-cooled turbogenerators. Elek. sta. 34 no.5:72-
79 My '63. (MIRA 16:7)

1. Glavnoye upravleniye energeticheskogo khozyaystva Donetskogo
basseyna (for Degil', Panchenko, Turos). 2. Uralenergo (for
Sapel'nikov).

(Turbogenerators)

AVRUKH, V.Yu., inzh.; DUGIN, A.I., inzh.

Power load limits of Russian turbogenerators with hydrogen surface/
cooling. Elek. sta. 35 no.9:56-59 S '64.

(MIRA 18:1)

Name: AVRUKH, E. L.

An article on cold-cathode type radio tubes, describing two types of photo multiplier tubes: The difference is reflected in the methods of accelerating primary electrons: (1) a multi-dynode (multi-stage) electron multiplier, and (2) electrons receive energy in the form of alternating voltage with matched frequency.

REF: R. F. #12, pg 48, col 2,
1937

Ye. L.
AVRUKH, YE. L.

USSR/Engineering - Chrome plating

Card 1/1 : Pub. 12 - 8/11

Authors : Zinovich, N. S., and Avrukh, E. L.

Title : Thermodiffusion chrome-plating of precision parts for a fuel manifold

Periodical : Avt. trakt. prom. 5, 25-27, May 1954

Abstract : Thermodiffusion chrome-plating of precision parts for a fuel manifold is described. The chrome plating was conducted on components made of KhVG, ShKh15, and U8 steels in the temperature range of 900 to 1150°C. Tables; illustrations; graph.

Institution :

Submitted :

BABANSKIY, Yu.K.; BALABEKYAN, O.I. (Orenburg); PENNER, D.I.; AVRUKINA, T.E.
(Leningrad); SVETKOV, L. (Moskva)

Discussion of the draft program of physics for the eight-year
school and the secondary school of general education with
industrial training. Fiz.v shkole 20 no.1:62-65 Ja-F '60.
(MIRA 14:10)

1. Gosudarstvennyy pedagogicheskiy institut, Rostov-na-Donu
(for Babanskiy). 2. Pedagogicheskiy institut, Sverdlovsk (for
Penner).

(Physics—Study and teaching)

AVRUNIN, A.G.; ARINKIN, V.V.; ANDREYEV, N.N.; STRUNGE, B.N.; SEMIDT, M.M.;
SEDOV, V.M., inzhener, retsentsent; MOROULIS, Ya.B., kandidat
tekhnicheskikh nauk redaktor; PETROV, G.I., inzhener, zaveduyu-
shchiy redaktsiyey; MATVEYENVA, Ye.N., tekhnicheskiiy redaktor

[The D50 series locomotive and marine engines] Teplovoznye i
sudovye dvigateli D50; konstruktsiia, ekspluatatsiia, razborka,
sborka i regulirovka. Moskva, Gos. nauchno-tekhn. izd-vo mashino-
stroit. lit-ry, 1952. 269 p. [Microfilm] (MLRA 7:10)
(Diesel engines)

AVRUNIN, Abram Grigor'yevich; ARINKIN, Viktor Vasil'yevich; MUL'MAN, Boris Yefimovich; SMIRNOVE, Boris Nikolayevich; MORGULIS, Yu.B., kand. tekhn.nauk, rotsenzent; MELEYEV, A.S., inzh., red.; GKRASIMOVA, Ye.S., tekhn.red.; SOKOLOVA, T.F., tekhn.red.

[D 100 diesel engine] Dizel' D100. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 325 p. (MIRA 11:7)
(Diesel engines)

AVRUNIN, Abram Grigor'yevich, inzh.; RAKHMATULIN, M.D., inzh, red.;
BOBROVA, Ye.N., tekhn.red.

[2D100 diesel for diesel-electric locomotives; maintenance]
Teplovosnyi dizel' 2D100; tekhnicheskoe obsluzhivanie. Moskva,
Gos.transp.zhel-dor.izd-vo. 1958. 334 p. (MIRA 11:12)
(Diesel engines) (Diesel locomotives)

AVRUNIN, A.G., inzh.; RAKHMATULIN, M.D., kand. tekhn. nauk, rotsenzeit;
KISELEVA, N.P., inzh., red.; MAKUNI, Ye.V., tekhn. red.

[Diesel engine 2D100 for diesel locomotives; its maintenance
and repair] Teplovoznii dizel' 2D100; tekhnicheskoe obsluzhi-
vanie. Izd.2. 1 spr. 1 dop. Moskva, Transzheldorizdat, 1963.
313 p. (MIRA 16:4)

(Diesel engines--Maintenance and repair)

AVRUNIN, A.L.

Utilization of reclaimed wool in the manufacture of blankets
and felt. Leh. prom. no.4:17-19 O-D '64 (MIRA 18:1)

100-07 (m) (D)
ACC NR: AT6029624

SOURCE CODE: UR/0000/66/000/000/0053/0062

AUTHOR: Avrunina, G. A.

ORG: none

TITLE: Experimental evaluation of the significance of the dose rate for biological effectiveness of incorporated radioactive isotopes; method of "simulating" internal irradiation with external irradiation according to time distribution

SOURCE: Voprosy obshchey radiobiologii (Problems of general radiobiology). Moscow, Atomizdat, 1966, 53-62

TOPIC TAGS: radiation simulation, radiobiology, radioisotope, relative biologic efficiency, radiology, irradiation dosimetry

ABSTRACT: The author points out the difficulties of determining the RBE of an internal irradiation dose and proposes a method to simplify the problem. The method is based on the use of external irradiation as a model to simulate internal irradiation in comparing RBE. The spatial distribution of an internal irradiation dose is practically impossible to reproduce in a model, but time distribution can be simulated by determining the time distribution of an internal emitter dose. The selection of a time interval (hourly, daily, weekly or other) for averaging the dose rate of an internal emitter depends on the half life period of the isotope and its

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ACC NR: AT6029624

excretion rate from the body. With dosimetry of internal irradiation based primarily on measurement of absolute activity, the problem is reduced to studying the dynamics of the activity level in experimental animals and computing the dose rate according to formula. A given internal irradiation effect can be simulated with external irradiation by using one or a combination of the averaged dose rates. As long as the simulated irradiation must be constant, X-irradiation cannot be used; however, gamma irradiation is suitable for such purposes. At time of simulated irradiation, animals should be placed under similar conditions as in actual experiments with internal administration of isotopes. In a series of experiments staged on rats using averaged dose rates of radiophosphorus, the effectiveness of internal and external irradiation was the same, and in some cases slightly higher for internal irradiation. On the whole, it appears that the spatial distribution of an internal emitter dose quantitatively does not play as significant a role as often assumed. Orig. art. has: 5 figures and 1 table.

SUB CODE: 06/ SUBM DATE: 23Apr66/ ORIG REF: 007/ OTH REF: 007

Card 2/2 *LHP*

AVRUNIN, M.

Accounting

Calculation of indexes for the fulfillment of the output plan and production costs in the production balance sheet. Bukhg. uchet 12, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

BERKOVSKIY, V.S.; AVRUNIN, P.M.

Improving roll grooving on the 550 mill. Metallurg 7 no.10:
7-11 0 '62. (MIRA 15:9)

(Rolls (Iron mills))

AVRUNIN, P.M.; SIDOROV, K.V.

Strength of textolite bushings. Metallurg 9 no.10:34 0 '64
(NIRA 18:1)

1. Zavod "Dnepropetsstal".

PAVLOV, T.M.; ANTONIN, P.M.

Investigating the longitudinal and transverse effectiveness
of deformation during rolling. Izv. vys. shk. ziv. i chern.
met. 8 no.9:92-97 '65. (MIRA 18:9)

1. Moskovskiy institut stal i splavov.

BERKOVSKIY V.S., inzh.; OSADCHIIY, A.N., inzh. Prinimali uchastiye: STETSENKO,
N.V.; LOMAREV, M.I.; AVRUNIN, P.M.; SHALIMOV, M.I.; IVANISHKIN, A.Ya.;
OVECHKIN, V.I.; POVETKIN, G.I.; SILVERDIN, V.I.

Grooving for the rolling of strip with acute angles. Stal' 23 no.7:
627-631 J1 '63. (MIRA 16:9)
(Rolling (Metalwork)) (Rolls (Iron mills))

BERKOVSKIY, V.S.; OSAKCHIIY, A.N.; AVRUNIN, P.M.

Improving the roll pass design of jobbing mills for the rolling
of high alloy steel. Metallurg 10 no.3:24-25 Mr '65.

(MIRA 18:5)

1. Moskovskiy institut stali i splavov i zavod "Dneprospetsstal".

POLUKHIN, P.I.; BERKOVSKIY, V.S.; OSADCHIY, A.N.; STETSSENKO, N.V.;
AVRUNIN, R.M.; IVANKIN, Yu.I.

Oval and edged oval system of roll passes on tandem light
section mills for rolling high alloy steel. Stal' 25
no.4:337-341 4p '65. (MIRA 18:11)

1. Moskovskiy institut stali i splavov i Zavod "Dneprospetsstai".

CA 11/11/11, 11.1.

25

The preparation of synthetic silk fibers for dyeing.
A. I. Avrunina and A. S. Frolov. *Textil. Prom.* 7, No.
1, 337 (1947).— The swelling of viscose fibers by immersion
in water, in soap solns., in solns. of wetting agents, or in
solns. of NaOH is an important factor affecting subse-
quent dyeing operations. Treatment at 60° for 40 min.
is recommended for optimum results when 2-3 g./l.
of wetting agent, 5 g./l. of oleic soap, or 1 g./l. of soda
ash is used. Marshall Sittig

of direct dyes in dyeing viscose fabrics. A. I. Arutyunyan and A. G. Grigorichina. *Russk. Khim. Tekhnol. 1953, 6: 67; Referat. Zhur., Khim. 1953, No. 46501.* Twenty-one domestic dyes are divided into 4 groups according to the kinetics of their absorption by viscose fibers as affected by temp. and concn. of electrolytes in the dye bath. The 1st group (Direct Light Blue, Direct Turquoise Light Resistant, and Direct Light Blue Z) is characterized by weak absorption of the dye from soln. in the absence of electrolytes and by little effect of temp. and duration of dyeing on absorption. The 2nd group (Direct Violet, Direct Green ZhKh, Direct Ruby Red, Direct Red X, Direct Maroon, Direct Brown ZhKh, Direct Brown KKh, Direct Blue Light Resistant, and Direct Dark Green) is characterized by appreciable absorption at the beginning of dyeing, noticeable increase in absorption with increasing temp. with a sharp optimum at approx. 60°, and satisfactory leveling. To prevent spottiness in the early stages of dyeing, the electrolytes should be added in 3-4 stages during 20-30 min. after the start while the bath is heated. The 3rd group (Direct Blue KM, Direct Blue M, Direct Black ZS, Direct Bright Orange, Direct Blue ZM, Direct Black Z, and Direct Black K) is characterized by good absorption of the dye in the absence of electrolytes, sharp increase of absorption with temp., and poor leveling. Therefore, dyeing should be carried out with gradual increase in temp. and a small (5%) salt content. The 4th group belongs chrysophenine for which the optimum temp. is 40-60°. It is satisfactorily absorbed in the absence of electrolytes and in their presence absorption attains 76% of its initial concn. Chrysophenine levels well and gives good results in combinations with dyes of the first group. M. Hosh

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AVRUNINA, Anna Isaakovna; ARSEN'YEV, Nikolay Nikolayevich; RUSAKOV,
Nikolay Gennadiyevich; TUMAYAN, Stepan Akopovich; KUKIN, G.N.
retsensent; NATANSON, I.A., retsensent; KOPELEVICH, Ye.I., redaktor;
MRDVEDEV, I.Ya., tekhnicheskiy redaktor

[General silk technology] Obshchaya tekhnologiya shelka. Moskva,
Gos. nauchno-tekhn. izd-vo M-va legkoi promyshl. SSSR, 1956.
241 p. (Silk manufacture) (MLRA 10:5)

13-
Nylon material for parachutes. L. A. Bragina, A. I.
V. T. Shuklov, U.S.S.R. 105,810,
May 25, 1957. The material is made with an aq. emulsion
of paraffin, stearin, NH_4OH , and kerosene. A suitable
emulsion is prepared from paraffin 10, stearin 20, 25% NH_4OH
20, kerosene 100, k. and water to make 1000 ml. M. H.

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22 May

May

LOSHKAREV, M.A.; AVRUNINA, A.M.; ROSTOVTSOVA, V.K.

Effect of surface active agents on the dissolution of zinc in
acid. Trudy IKHTI no.6:12-20 '58. (MIRA 13:11)
(Surface active agents) (Zinc) (Acids)

1A

Potentiometric determination of small quantity of manganese. A. M. Avramina and V. M. Zankov. *Zashchita* 7, 1238-42 (1988). In Park's method (C. A. 3, 47) for the potentiometric detn. of Mn by oxidation with NaIO_3 , the MnO_2 is reduced with excess Na_2AsO_4 and the excess titrated with KMnO_4 in the presence of a little As_2O_3 . Equally good results can be obtained by direct titration of the MnO_2 with the Na_2HAsO_4 solution. A large excess of Fe^{2+} does not disturb the detn., the method can be used in the analysis of steel. Oxidation of Mn by the persulfate method gives high values.

Chas. Blane

ADA 556 DETAILING LITERATURE CLASSIFICATION

CA

7

Rapid potentiometric method of determining manganese

Isaev, A. M., Arutunian and A. M. Zakhov. *Zashchita*
Lab. 6, 680-80 (1980); cf. C. A. 85, 4908P. — The methods
of Lang (C. A. 29, 7217) and Müller for detg. Mn were
checked with pure MnO₂, Mn oxides, Fe-Mn and spinel.
The former method gave accurate and reproducible re-
sults when HPO₄ was used to form the metaphosphate
complex. The Müller method (C. A. 18, 1638) also gave
good results in the presence of 0.1-0.7 ml. of 0.4% (w/v)
vin. as a catalyst. B. Z. Kamish

ASAC SLA METALLURGICAL LITERATURE CLASSIFICATION

AVRUMINA, B.M.

Preparation of wood cellulose with the aid of organic solvents. H. V. V. Yanovskii, S. S. Malevskaya, E. I. Tsvetkov, and B. M. Avrumina. J. Appl. Chem. U.S.S.R. 17, 315-20 (1964) (Engl. translation). See C.A. 48, 7584c. H. I. H.

2 my

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AVRUNINA, S. M.

(5)
Preparation of wood cellulose with the aid of organic sol-
vents. H. V. V. Yanovsky, H. S. Malevskaya, B. I.
Yakovlev, and S. M. Avrunina (V. M. Molodtsov, Technol.
Inst., Leningrad) *Khim. Zashch.* 1984, 134-40
(1984). Neither $(CH_3OH)_2$ nor glycerol in aq. soln. are
very effective delignifying solvents (at 110-50°) for wood
chips. The same solvents are much more effective in anhyd.
condition. However, mono-hydrox. compds. ($3uOH$,
 $1tOH$) are more effective when mixed with H_2O .
G. M. Kosolupoff

18-
9-20-84

T

Country : USSR
Category: Human and Animal Physiology. Action of Physical Factors. Ionizing Radiation.

Abs Jour: RZhDiol., N. 19, 1958, 09378

Author : Kochetkova, T.I.; Lvrunina, O.I.

Inst : -

Title : Changes in the Lungs and other Organs Following Intra-tracheal Administration of Radioactive Sodium Chloride and Chromium Phosphate.

Orig Pub: Tr. Vses. konferentsii po rad. radiol. ekspozits. med. radiol. M., Medgiz, 1957, 194-197

Abstract: Rats were administered, intra-tracheally, insoluble $\text{CrP}^{32}\text{O}_4$, in doses of 30 ng in 1 ml of a 5% solution of glucose and Na^{24}Cl in the form of a 1 ml 2.5% solution. The greatest single dose of Na^{24}Cl was

Card : 1/2

T-144

USSR/Human and Animal Physiology. Action of Physical Agents.

Abs Jour: Ref Zhur-Biol., No 8, 1958, 37009.

Author : Domshlak, M.P., Avrunina, G.A., Grigoriev, Y.G.,
Darenskaya, N.G.

Inst :

Title : Materials to Investigation on the Specificity of
Reaction of the Organism to Irradiation.

Orig Pub: Pub. Vestn. rentgenol i radiol., 1957, No 2, 3-10.

Abstract: Attention is attracted to the importance of estimation of the distribution of a dose of internal irradiation in time. In experiments on 400 mice and 115 rats the difference in the value of the absolutely minimal lethal dose of external irradiation and internal irradiation with p^{32} and the time of the animal's death become minimal, when external irradiation was equal to internal

Card : 1/3

USSR/Human and Animal Physiology. Action of Physical Agents. T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 37009.

was noted, and vice-versa. In order to bring about a 100% destruction of the animal by irradiation of various segments of the body, equal in mass, various doses of radiation were needed (for the head, 2000r, chestcage, 10,000 r, the upper abdomen 5000 r.) Along with the common manifestations of radiation illness, identical for irradiations of various segments of the body, specific changes were noted, characteristic for irradiation of definite segments of the body.

Card : 3/3

PHASE I BOOK EXPLOITATION

SOV/5200

Alexander, Peter

Yadernoye izlucheniye i zhizn'. Moscow, Atomizdat, 1959. 254 p. 6,800 copies printed.
Transl. of Atomic Radiation and Life.

Translator (Title page): G.A. Avrunina; Ed. (Title page): O.V. Popov, Candidate
of Medical Sciences; Ed.: M.A. Saguro; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This book is intended for the general reader.

COVERAGE: The book is a translation from English of a work by Peter Alexander
entitled "Atomic Radiation and Life" published by Penguin Books. The intro-
duction to the Russian edition was written by O.V. Popov and points out that
Alexander's work does not reflect the contributions of Soviet scientists whose
findings in this field often contradict those of Western scientists. The work
and experimental findings of M.I. Nemenov, A.V. Lebedinskiy, M.N. Livanov, P.D.
Gorizontov, Yu.G. Grigor'yev, A.B. Tsypin, Yu.K. Kudritskiy, G.A. Nadson, G.S.
Filippov, and B.L. Astaurov on the effect of radiation on the nervous system, and
that of N.P. Dubinin, M.A. Arsen'yev, and G.G. Tinyakov on the reproductive system

Card 1/2

Atomic Radiation (Cont.)

SOV/5200

are cited as examples. Mention is made of the development of highly productive strains of antibiotics by S.Yu. Gol'dat and S.I. Alikhanyan using radiation means; of mutations in silkworms achieved by V.A. Strunnikov; and of V.L. Troitskiy's use of gamma rays in sterilizing nutritive media for microorganisms and in preparing vaccines.

AVAILABLE: Library of Congress

Card 2/2

JA/rn/gmp
7-14-61

PHASE I BOOK EXPLOITATION

SOV/4046

Akademiya meditsinskikh nauk SSSR. Institut gigiyeny truda i profzabolevaniy.

Materialy po toksikologii radioaktivnykh veshchestv. vyp. 2: Radioaktivnyye kobal't, natriy, fosfor, zoloto (Material on the Toxicology of Radioactive Substances. No. 2: Radioactive Cobalt, Sodium, Phosphorus, and Gold). Moscow, Medgiz, 1960. 169 p. Errata slip inserted. 3,000 copies printed.

Eds. (Title page): A. A. Letavet, Member, Akademiya meditsinskikh nauk SSSR, Professor, and E. B. Kurlyandskaya, Doctor of Biology, Professor; Ed. (Inside book): D. I. Zakutinskiy; Tech. Ed.: M. I. Gabel'and.

PURPOSE: This collection of articles is intended for persons in radio-biology and radiation hygiene, doctors in public health departments and epidemic control stations, and physicists and others concerned with the determination of permissible limits of radioactive isotope concentration.

COVERAGE: This collection of articles contains material from experimental studies in connection with research on the influence of radioactive cobalt on an organism and on the aftereffects of intratracheal administration of soluble salts of radioactive sodium and insoluble compounds of radioactive

Card 1/5

Material on the Toxicology (Con't)

BOY/4046

phosphorus and gold. Data on the exchange of radioactive cobalt and calculations of the tissue dosage in an organism for single and repeated injections are given. Individual articles treat the effect of radioactive cobalt on the hematogenous system, albumin and carbohydrate exchange, changes in the cardiovascular system, pathomorphological displacement in organs, and stimulation of the process of elimination of radioactive isotopes from organisms. Permissible limits of radioactive cobalt concentration in water, based on exhaustive experiments, are presented. The differences between the effects of soluble and insoluble compounds containing radioactive isotopes (sodium, phosphorus and gold), and the formation of neoplasms in the lungs after intratracheal injections of insoluble compounds of phosphorus and gold are established. The amount of tissue dosage causing blastomeric growth is determined. References accompany all articles but the first.

TABLE OF CONTENTS:

Kurlyandakaya, E. B. [Professor, Doctor of Biological Sciences]. Some New Data in the Toxicology of Radioactive Substances.

3

Card 2/5

SOV/4046

Material on the Toxicology (Con't)

Avrunina, G. A. Data on Co ⁶⁰ Exchange in Rats and Rabbits After a Single Injection of Co ⁶⁰ , and Calculation of the Radiation Dosage in the Body	14
Avrunina, A. G. Accumulation and Elimination of Co ⁶⁰ in Animals, and the Tissue Dosage When it is Taken Daily Through the Mouth	27
Beloborodova, N. L. Change in Hematogenous Processes After Prolonged Administration of Co ⁶⁰ Into the Organism	39
Beloborodova, N. L., V. L. Viktorova, and Ye. K. Med'kina. Hematogenesis in the Posterity of Rats After Prolonged Co ⁶⁰ Inoculation	53
Grishchenko, Ye. D. Change in the Fractional Composition of Serum Albumins and in the Residual Nitrogen Content in Rabbits After Continuous Administration of Co ⁶⁰	65
Vinogradova, N. I. Effect of Co ⁶⁰ on Carbohydrate Exchange in the Liver of Rats	79

Card 3/5

Material on the Toxicology (Con't)

SOV/4046

- Vinogradova, N. I., and Ye. D. Grishchenko. Disturbance of Certain Phases of Carbohydrate-Phosphorus Exchange in Rabbits Subjected to Continuous Co^{60} Affection 116
- Rubanovskaya, A. A. Change in the Penetrability of the Eye and Skin Vessels of Rabbits After the Continuous Injection of Co^{60} 94
- Saytanov, A. O. Electrocardiographic Investigation of Rabbits After Receiving Prolonged, Small Doses of Stable and Radio-active Cobalt 102
- Golovashchikova, I. N. Electrocardiogram of Rabbits Under the Continuous Effects of Small Doses of Co^{60} During Functional Tests (Ashner Test, Ammonia Inhalation and Adrenalin Injection) 121
- Kaplanskiy, A. S. Morphological Change in the Organism of Rabbits During Continuous Injection of Co^{60} 130
- Card 4/5

Material on the Toxicology (Con't)

SOV/4046

Rubanovskaya, A. A. Effect of Cyclohexanediaminetetracetic Acid (TsDTU) on the Elimination from the Organism of Radioactive Strontium and Cobalt

145

Kochetkova, T. A., and G. A. Avrunina. Delayed Aftereffects of Intratracheal Administration of Soluble and Insoluble Compounds of Certain Radioactive Isotopes (Na^{24}Cl , $\text{CrP}^{32}\text{O}_4$, and Colloid Au^{198})

153

AVAILABLE: Library of Congress

Card 5/5

JA/cdw/lfh
8/29/60

AVRUNINA, G.A.; KARAMZINA, N.M.; FEDOROVA, V.I.; YANOVSKAYA, B.I.

Biologic action of high energy irradiation. Biul. eksp. biol. i med.
52 no.8:52-56 Ag '61. (MIRA 15:1)

1. Iz Instituta gigiyeny truda i profzabolevanly AMN SSSR i gruppy
pri deystvitel'nom chlene AMN SSSR B.A.Lavrove, Moskva. Predstavlena
deystvitel'nyy chlenom AMN SSSR A.A. Letavetom.
(RADIATION--PHYSIOLOGICAL EFFECT)

S/865/62/002/000/037/042
D405/D301

AUTHORS: Rapoport, I.A., Yarmonenko, S.P. and Avrunina, G.A.
TITLE: Effect of high-energy protons on frequency of mutations
SOURCE: Problemy kosmicheskoy biologii. v. 2. Ed. by N. Sisy-
khan and V. Yazdovskiy. Moscow, Izd-vo AN SSSR, 1962,
370-386

TEXT: The study of the effect of high-energy protons on the frequency of mutations is important owing to the fact that protons of energy up to 1000 Mev constitute a major component of cosmic radiation at a radius of 100-1000 km from the Earth's surface, this component being concentrated in particular in the regions of magnetic anomaly. The proton beam was obtained from the synchrocyclotron of the Joint Institute for Nuclear Research. The characteristic of the beam and the method of calculation are described in the references. *Drosophila* males of the line yellow³⁹ were subjected to proton irradiation. **Conclusions:** Protons of energy 660 Mev in dose-rates of

Card 1/3

Effect of high-energy ...

S/865/62/002/000/037/042
D405/D301

510-12140 r bring about an increase in the frequency of recessive lethal mutations in *Drosophila* sex chromosomes that is proportional to the dose, constituting ~2% per each 1000 r. The curve mutation frequency vs. dose is very similar to the corresponding curve for gamma radiation. The measurement of the frequency of recessive lethal mutations for doses of 3980, 9165, 10745, 11485 and 12140 r during 6 experiments showed a sharp drop in the mutation yield of irradiated spermatogonia as compared to that of irradiated spermatozooids; the main reason for this is apparently the disproportionate rate of reduplication of gonial cells with chromosome aberrations and semi-dominant and dominant lethals with respect to those left normal, and not the low mutability of spermatogonia. On comparing the fertility in the first generation of crossed males, it is found that the frequency of dominant lethal mutations in the irradiated spermatozooids has a similar pattern to that of dominant lethal mutations due to X- and gamma radiation. The curves for the frequency of sterility and semi-sterility mutations are similar to those for other mutations. The fact that the mutability curves retain their linearity when the oxygen concentration increases suggests that, in

Card 2/3

Effect of high-energy ...

S/865/52/002/000/037/042
D405/D301

the case of irradiation by high-energy protons, the oxygen is a more effective component of the mutation background than organic peroxides and radicals. There are 3 figures and 5 tables.

Card 3/3

YARMONENKO, S.P.; AVRUNINA, G.A.; SHASHKOV, V.S.; GOVORUN, R.D.

Action of radiation protectors in whole-body irradiation by
high-energy protons. Probl.kosm.biol. 2:388-392 '62.

(MIRA 16:4)

(RADIATION--SAFETY MEASURES)
(PROTONS--PHYSIOLOGICAL EFFECT)

4072
S/204/62/002/001/003/010
D268/D302

22.2400
AUTHORS:

Yarmonenko, S.P., Avrunina, G.A., Shashkov, V.S., and
Govorun, R.D.

TITLE:

The oxygen effect in whole-body irradiation with
high energy protons

PERIODICAL: Radiobiologiya, v. 2, no. 1, 1962, 125 - 127

TEXT: Biological protection and its dependence on the oxygen ef-
fect were studied in male white mice (weight 21 - 23 g) chemically
protected by peritoneal injection of the following 10 - 15 min. be-
fore irradiation: MDA (beta-mercaptoethylamine chlorohydrate), cy-
stamine dichlorohydrate, and AET (S, beta-aminoethylisothiuronium
bromide hydrobromide) at 3 mg/mouse, 5-methoxytryptamine chlorohy-
drate at 1.5 mg/mouse, and Serotonin (5-hydroxytryptamine creatin-
ine sulfate) at 1 mg/mouse. Serotonin and 5-methoxytryptamine were
synthesized by N.N. Suvorov, and the remainder by F.Yu. Rachinskii.
Irradiation was by proton impulse beam (660 MeV) at a dose rate of
300 - 400 rad/min. from the synchrocyclotron at the Ob'yedinenny

Card 1/3

The oxygen effect in whole-body ...

S/205/62/002/001/003/010
D268/D302

institut yadernykh issledovaniy (Combined Institute for Nuclear Research). All compounds tested increased survival, the average duration of life in protected animals being 8.1 - 16 days with doses in the range 1,070 - 1,472 rad as against 5.9 - 8.7 days for unprotected with 1,070 - 1,360 rad. Reduction in the biological effect can be attributed to reduction in ionizing density in relation to the acceleration of high energy protons. There was an increase in H_2O_2 yield in water irradiated with accelerated protons particularly at 1.8 - 7 Mev, which can be interpreted as an indirect indication of the oxygen effect appearing in proportion to particle acceleration. Since the oxygen effect increases under the action of high energy protons, it was thought that radiation sickness could be alleviated by preparations in which the oxygen effect plays a major role in the mechanism of radioprotection, and this was confirmed experimentally by local bone marrow asphyxia in mice irradiated with protons (660 mev) at 1,300 rad. There are 2 figures and 10 references: 6 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: H.M. Patt,

Card 2/3

KOCHETKOVA, T.A.; AVRUNINA, G.A.; SAGAYDAK, N.D. (Moskva)

Carcinogenic properties of some radioactive compounds in the late period of their action. Arkh.pat. 24 no.513-7 '62.

(MIRA 15:5)

1. Iz radiotoksikologicheskoy laboratorii (zav. - prof. E.B. Kurlyandskaya), patomorfologicheskoy laboratorii (zav. - prof. P.P. Dvishkov) Instituta gigiyeny truda i profzabolevaniy (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Letavet) AMN SSSR.
(CARCINOGENS) (RADIOISOTOPES--PHYSIOLOGICAL EFFECT)

YARMONENKO, S.P.; AVRUMINA, G.A.; GOVORUN, R.D.

Oxygen effect following total irradiation with high energy
protons. Radiobiologiya 2 no.1:125-127 Ja '62 (18:1)

34758

S/020/62/142/003/026/027
B144/B101

27.1220

AUTHORS: Kurlyandskaya, E. B., Avrunina, G. A., Ponomareva, V. L.,
Fedorova, V. I., Yanovskaya, B. I., and Yarmonenko, S. P.

TITLE: Relative biological efficiency (RBE) of 660 Mev protons

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 3, 1962, 702-705

TEXT: The biological efficiency of 660 Mev protons produced in the 6 m synchrocyclotron of the Ob'yedinenny institut yadernykh issledovan'y (Joint Institute of Nuclear Research) in Dubna was investigated and compared with the effect of x-rays. White mice and rats were whole-body irradiated with doses of 260 - 44,800 rad and 300 - 1600 rad, respectively. The interdependence of perishing time and radiation dose and the influence on the hematopoietic system were similar to those of x-rays, but the relevant RBE was much lower. Irradiations with proton doses of 565 rad and x-ray doses of 400 rad which are about equal as to their lethal effect produced, however, significantly different aftereffects. The gonads proved to be the most sensitive organs (RBE ~ 1). The cancerogenic effect of 660 Mev protons was equal or somewhat stronger than that of x-rays.

Card 1/3

Relative biological efficiency...

S/020/62/142/003/026/027
B144/B101

The possibility of increasing the radioresistance in animals by radiation blockers was studied. β -mercapto ethyl amine hydrochloride, hydrobromide of δ , β -amino ethyl isothiuronium bromide, and serotonin creatinine sulfate yielded positive results. This is probably due to the reduced ionization density of 660 Mev protons. Their low RBE may result from the pulse character of the proton beam, the high dose intensity, and perhaps also from the reduction of the linear-energy expenditure with increasing particle energy. This problem has still to be solved. The RBE of different radiations should be detailed as to individual body systems and different periods after irradiation. V. P. Dzhelepov and M. M. Komechikov are thanked for assistance and advice. There are 4 figures, 1 table, and 2 references: 5 Soviet and 4 non-Soviet. The four references to English-language publications read as follows: J. B. Storer, P. S. Harris et al., *Radiation, Res.*, 6, No. 2, 188 (1957); R. Ghys, *Intern. J. Rad. Biol.*, 2, No. 4, 359 (1960); H. M. Patt, J. W. Clarke, H. H. Vogel, *Proc. Soc. Exp. Biol. and Med.*, 84, 1, 189 (1953); H. M. Patt, R. L. Straube, *Radiation Res.*, 1, 2, 226 (1954).

Card 2/3

ACCESSION NR: AT4042722

S/0000/63/000/000/0510/0514

AUTHOR: Yarmonenko, S. P.; Kurlyandskaya, E. B.; Avrunina, G. A.; Gaydova, Ye.S.; Govorun, R. D.; Orlyanskaya, R. L.; Paly'ga, G. F.; Ponomareva, V. L.; Fedorova, V. I.; Smakova, N. L.

TITLE: Reactions to radiation and chemical protection of animals subjected to the effects of high-energy protons

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatzionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 510-514

TOPIC TAGS: corpuscular radiation, high energy proton, synchrocyclotron, gamma ray, radiation effect, radioprotective agent, RBE

ABSTRACT: Experiments were performed to determine the immediate and the delayed effects of high-energy protons and their RBE on animal organisms. High-energy protons of 660 Mev were generated on a synchrocyclotron. Comparative tests using gamma rays from a Co⁶⁰ source were used in establishing the RBE. Nonpure strain mice and rats were used, in addition to mice of the BALB and C-57Bl strains.

Card 1/5

ACCESSION NR: AT4042722

All materials were subjected to statistical analysis. In comparative experiments performed on rats subjected to a dose of 500 rad, the degree of injury to hemopoietic organs by protons was considerably less than injury caused by gamma radiation. The depression of hemopoiesis in the bone marrow and the spleens of animals irradiated by protons was less profound and less prolonged, and regenerative processes began earlier than in injuries produced by gamma rays. This difference of effect was particularly clear in the dynamics of the peripheral blood. After exposure to gamma irradiation, a profound and prolonged anemia developed, accompanied by a loss of 44% of the erythrocytes and 51% of the hemoglobin. An equivalent dose of protons caused only insignificant lowering of these indices. Similar effects were observed in the white blood corpuscles, particularly in respect to neutrophils. The results obtained confirm that the condition of peripheral blood does not reflect the true depth of radiation damage to hemopoiesis. In experiments with white mice, a study was made of early destructive changes in the brain marrow, the dynamics of mitotic activity, and the kinetics of cells with chromosomal injuries. Exposure to protons induced typical radiation degeneration of cells of the bone marrow, a slowing down of mitotic activity, and injuries to the chromosomes. A strong linear relationship of injury-to-dose was

Card

2/5

ACCESSION NR: AT4042722

observed in all three indices within the 250--1000 rad range. Exposure to equivalent doses of gamma rays produced more pronounced changes, indicating that the RBE of protons is equivalent to 0.5--0.7. Preliminary administration of radio-protective agents -- AET (S,S'-aminoethylisothionium), MEA (mercaptoethylamine), and 5-MOT(5-methoxytryptamine) -- diminished the number of degenerating and aberrant cells in the bone marrow in proportion to the effect of the indicated drugs on survival. The most effective appeared to be a combination of MEA and 5-MOT, whose use assured the survival of 50% of the mice when irradiated by doses of 1900 rad. If irradiation is fractionated, the protective effect of the drugs is reduced sharply, or it disappears altogether. In experiments on male mice of the BALB strain subjected to doses of 500 and 700 rad, reversible changes were observed in the weight of testicles. The change of weight and its subsequent recovery was due to the death and the subsequent regeneration of germ cells. Protons have a typical sterilizing effect on the genitalia, but their RBE, in comparison with gamma rays, lies between 0.6 and 0.7. The use of antiradiation drugs did not prevent the sterilizing action of protons, but it caused a somewhat smaller loss of weight of the testicles and produced a shorter period of sterility. White male mice which had been protected by AET, MEA, 5-MOT, and cystamine from the effects of proton doses of 1300--1600 rad recovered their generative functions

Card 3/5

ACCESSION NR: AT4042722

almost completely four to seven months after irradiation. The development of the first generation of 290 mice obtained by crossing the protected and irradiated males with intact females took place without visible somatic injuries. The relative effectiveness of protons and gamma rays in causing somatic mutations was studied on livers of white rats who were subjected to doses of 150 rad. Regeneration of the liver was induced by removing the large left and the front right lobes of the liver. The operation was performed 24 hours after irradiation. The animals were killed 30 hours after the operation, i. e., during the first wave of the increase of mitotic activity. Control animals had 6.9% of aberrant cells, while after irradiation by protons and gamma rays, the number of aberrant cells was 20% and 29%, respectively. This indicates that the RBE of protons in respect to somatic mutations is around 0.7. New data were obtained on the blastomogenic effect of protons. Out of 85 irradiated rats, tumors were found in 39. Twenty-five of them had multiple tumors in various locations. In experiments on non-pure strain white mice, it was possible to show that antiradiation drugs, while increasing the radio resistance of the animals, do not prevent subsequent development of new growth. Out of 65 irradiated mice who died at various periods after exposure to protons in doses from 1300 to 1500 rad (after having previously received antiradiation protection), fourteen had leucosis and four had sarcoma.

Card 4/5

KRAVCHUK, M.V., kand. tekhn. nauk; ALEKSEYEV, A.M.; AVRUSHKIN, Yu.I.

Selection of the power of automobile generators. Avt. prom. 30
no.12:32-35 D '64. (MIRA 18:2)

1. Moskovskiy avtomekhanicheskiy institut.

AVRUTIN, A.D.; DAVYDOVA, L.I.; LAVROVA, D.S.; RENNE, V.T.

Study of some factors affecting the development of ionizational
processes in the dielectric of oil-saturated paper capacitors.
Izv. NIPT no.7:231-241 '61. (MIRA 14:9)
(Electric capacitors)

ACCESSION NR: AP4015075

S/0138/64/000/001/0021/0024

AUTHORS: Avrushchenko, B. Kh.; Lepetov, V. A.

TITLE: Effect of preliminary aging on change in high elasticity properties of rubber at low temperatures

SOURCE: Kauchuk i rezina, no. 1, 1964, 21-24

TOPIC TAGS: high elasticity property, relative elongation, low temperature, static modulus

ABSTRACT: Type SKN-18 rubber with TM-2 hardness equal to 60 and 343% relative elongation has been studied to determine the preliminary aging effects on rubber strength at low temperatures. The specimen was subjected to 100% axial stress at temperatures from 20 to -50C, after various aging durations in a thermostat at 90C. The magnitude of K' , the coefficient of increase in rigidity during and after aging, does not depend on the determined temperature during the aging process itself. The coefficient of increase in strength at low temperatures after different storage time durations is expressed by the product KK' (K - rigidity increase before aging). The static modulus after aging at low temperatures is given by EKK' (E -

Card 1/2

ACCESSION NR: AP4Q15075

high elasticity static modulus at 20C, in kg sec/cm²). Orig. art. has: 10 formulas, 4 figures, and 2 tables.

ASSOCIATION: Leningradskiy filial nauchno-issledovatel'skogo insituta resinovoy promy'shlennosti (Leningrad Institute of Scientific Research in the Rubber Industry)

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: MA

NO REF SOV: 003

OTHER: 000

Card2/2

AVRUSHCHENKO, N.M.

Results of treatment of inflammatory diseases of the eye with
cortisone. Vestn. oft. no.6:70-71 '61. (MIRA 14:12)

1. Kafedra glaznykh bolezney (zav. - prof. N.Ye. Braunshteyn)
Khar'kovskogo meditsinskogo instituta.
(CORTISONE) (EYE-DISEASES AND DEFECTS)

KOSHTOYANTS, KH. S., SERBENYUK, TS. V., AVRUCHENKO, SH. I.

Pancreas

New facts on reflex regulation of inner secretion of the pancreas with the participation of chemical agents. Dokl. AN SSSR 86 No. 1, 1952.

Monthly List of Russian Accessions. Library of Congress, December 1952. Unclassified.

GRUDENOV, Ya.I.; AVRUTIK, T.N. (Gorlovka).

Problems on subjects from physics for setting up quadratic equations.
Mat. v shkole no.5:90-92 S-0 '58. (MIRA 11:10)
(Equations, Quadratic)

S/196/62/000/004/008/023
E194/E155

AUTHORS: Avrutin, A.D., Davydova, L.I., Lavrova, D.S., and
Renne, V.T.

TITLE: An investigation of certain factors that influence
the development of ionising processes in the
dielectric of paper-oil capacitors

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika,
no.4, 1962, 7, abstract 4 B27. (Izv. N.-i. in-ta
postoyan. toka, no.7, 1961, 231-241)

TEXT: The intensity of ionisation was assessed by measuring
the rate of impulses (discharges). A schematic diagram of the
equipment is given. To investigate the relationship between the
intensity of ionisation and the field strength the latter was
raised in steps of 2.5 kV/mm with a delay of 60 sec at each step.
The experimental capacitors were of the following characteristics.
Paper - type **KOH** -II (KON-II), thickness 10 microns and width
60 mm; number of layers 4, 5, 6 and 8; capacitance about 0.1
microfarads; impregnated with capacitor oil. The mean electrical
Card 1/2



MONOVALOV, Ye.G.; AVRUTIN, A.M.; SIDORENKO, Yu.A.; LOBACHEVSKIY, I.S.

Machining holes by rotary mandrels. Stan. 1 instr. 30 no.1:29-30
Ja '59. (MIRA 12:1)
(Drilling and boring machinery)

AVRUTIN, A.M., inzh.; PESTOV, B.M., inzh.; PUSTYL'NIK, M.Yu., inzh.

Mechanized assembly lines for the manufacture of welded drawing-machine frames. Svar.proizv. no.6:18-22 Je '60. (MIRA 13:7)

1. Minskiy stanko-stroitel'nyy zavod im. Kirova (for Avrutin).
2. Orgstankiprom (for Pustyl'nik, Pestov).
(Assembly-line methods) (Machine-tool industry)

AVRUTIN, A.M.; GURIN, N., red.; DOMOVSKAYA, G., tekhn., red.

[Put potentials in the service of the seven-year plan].
Rezervy - na sluzhbu semiletke. Minsk, Gos. izd-vo
BSSR. Red. proizvodstvennoi lit-ry, 1961. 59 p.
(MIRA 15:4)

1. Glavnyy tekhnolog minskogo stankostroitel'nogo zavoda imeni
Kirova (for Avrutin).

(Machine-tool industry)

USSR/Chemical Technology. Chemical Products and Their Application -- Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5324

Author: Goryaynov, K. E., Yefimov, A. D., Avrutin, M. A., Yakub, I. A.

Institution: None

Title: Gas Concrete Based on Entrainment Ash of Leningrad Heat and Power
Stations

Original
Publication: Novaya tekhn. : peredov. opyt v str-ve, 1956, ¹⁸ No 6, 11-14

Abstract: It was found that on the basis of entrainment-ash of Leningrad electric power stations it is possible to produce gas concrete with a volumetric weight of 820-950 kg/m³ and a compression strength of 80-100 kg/cm². Expenditure of Portland cement is of 160-230 kg/m³, that of aluminum powder 200-300 g/m³. There is described the technology of production of large gas concrete wall blocks, the manufacture of which is being set up at the Leningrad plant of Trust No 20.

Card 1/1

AVRUTIN, M.A., insh.; SPIVAKOV, M.S., insh.

Equipment for manufacturing and stretching cable reinforcements
for roof shells. Biul.tekh.inform. 3 no.2:9-12 F '57. (MIRA 10:10)
(Prestressed concrete)

AVRUTIN, M. A.

Stamp for compressing concrete mix. Stroitel' no.7:20 J1 '57.
(Concrete slabs) (MLRA 10:9)

AVRUTIN, M.L.

GOBYAYNOV, K.M., doktor tekhn. nauk; YEFIMOV, A.D.; VOLCHEK, I.Z., kand.
tekhn. nauk; AVRETTIN, M.L., inzh.; LIZOGUB, A.A., inzh.;
ZASNDATSEV, I.B., inzh.

Large wall blocks made of autoclave hardened lightweight concrete.
Bul. tekhn. inform. 4 no.2:1-5 P '58. (MIRA 11:3)

1. Chlen-korrespondent Akademii stroitel'stva arkhitektury (for
Yefimov).

(Concrete blocks) (Lightweight concrete)

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